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Atty. Docket No. 10012140-1

REMARKS

Applicant notes with appreciation the Examiner's withdrawal of the 35 U.S.C. 112 rejections raised in the first Office Action. However, applicant respectfully disagrees with the statement that applicant claims "inefficiency is patentable." Applicant did not state that inefficiency is patentable. Instead, applicant stated that the alleged inefficiency did not necessarily render the claims indefinite. More importantly, applicant disputes the Examiner's allegation that the claimed invention is inefficient and respectfully submits that this statement mischaracterizes the present invention. As stated in applicant's response to the first Office Action, the claimed chain of translators applies to situations where no individual translator is available to directly accomplish the conversion (see paragraph 0003, lines 3-5 of present specification). If a translator is available that can directly convert a datafile from an initial format to the desired final format, then such a single step translator is used (see paragraph 0026, lines 6-8). The claimed invention, which facilitates printing of datafiles in otherwise unsupported formats, is clearly not inefficient.

The Examiner has rejected claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over Cyr in view of Williams and further in view of Tolfa. This ground of rejection is respectfully traversed.

Cyr discloses a system having a printer 20, a printer interface 18 and a plurality of translators 12, 14, 15, 16 connected to the printer interface 18 via a network bus 10. The embodiment of Figure 4 includes a separate print controller 25 that is connected to the system via the network bus 10. Figure 3 of Cyr shows the elements of one of the translators, which include multiple CPUs and a "control process" 67. This system provides a distributed architecture in which the translators are able to operate in parallel (and not sequentially) to

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enable high speed printing operations (see, for example, lines 19-23 of column 2 and lines 59-64 of column 3).

The Examiner contends that Cyr discloses the recitation of independent claim 1 of "conveying the datafile in a first format to a printer, said printer including a controller," referencing the Abstract of Cyr, Fig. 4 #25 and Fig. 3 #67. However, applicant submits that neither print controller 25 nor the control process 67 are really included in the printer 20 as required by claim 1. They are both distinct elements that are connected to the printer 20 via the network bus 10.

Claim 1 also recites using the controller to select a chain of translators from a registry database for sequentially converting a datafile from a first format to a second format. Cyr does not teach or suggest using a chain of translators to sequentially convert a datafile. In contrast, the translators of Cyr are clearly described as operating in parallel, not sequentially. The Examiner recognizes this deficiency and contends that using a chain of translators to sequentially convert a datafile would have been obvious in light of Williams. Applicant respectfully disagrees.

Williams teaches a method and apparatus for determining an optimal multi-stage transformation from a first document format to a second format via multiple transformation applications. This is accomplished using a graphic depiction of a network of nodes (shown in Fig. 2), which is displayed on screen 18 as is described in lines 63-66 of column 2. This graphic depiction is then consulted to determine an optimal path based on a "cost" analysis. As such, Williams does utilize a chain of translators but does not use a controller to select a chain of translators from a registry database. The translators are selected from the graphic depiction of nodes displayed on the screen 18, not from a registry database. Therefore, even assuming for the sake of argument that Williams teaches modifying Cyr by chaining translators to optimize the

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transformation, Williams would still fail to suggest using a controller to select a chain of translators from a registry database. Furthermore, Williams applies to word processing where a subsequent user wishes to edit a document in a different format than the document was created in (see column 1, lines 27-32). Williams does not address transforming files for printing and therefore would not suggest a modification of the printing system disclosed by Cyr. Accordingly, applicant respectfully submits that it would not have been obvious to combine the Cyr and Williams references in the manner set forth by the Examiner.

Claim 1 also recites the step of "activating said controller to access a registry database over a network." The Examiner contends that Cyr discloses "activating said controller to access ... over a network." While it is not clear what the controller of Cyr accesses over a network, it is quite clear that none of the print controller 25, the control process 67 or the job controller 66 is activated to access a registry database. The Examiner recognizes this and asserts that accessing a registry database would have been obvious in light of Tofla. Applicant respectfully disagrees.

Tofla discloses a technology routing system 10 for controlling the conversion of a computer file from one format to another. The system 10 includes a technology routing program 20 and a plurality of technology translator families stored as dynamic link libraries (DLLs) in a mass storage device 22. The DLLs are the conversion programs or translators that are used by the technology routing program 20. Thus, while mass storage device 22 contains a plurality of translator programs, it does not actually include a database containing a listing of available translators, as required by claim 1. Furthermore, just because Tofla discloses a plurality of translators in mass storage device 22 does not mean that it would have been obvious to modify the Cyr-Williams combination to include such a mass storage device. Cyr discloses a plurality of translators 12, 14, 15, 16 connected to the printer interface 18 via a network bus

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10. There is no suggestion in the prior art that the translators of Cyr are insufficient or that they should be stored together in a mass storage device. Consequently, there is no motivation to combine the references in the manner suggested by the Examiner. The Examiner states that the proposed combination would have been obvious because to do so would have allowed one to determine the best path for converting a file from one format to another per the teaching of Tolfa in the Abstract. However, while Tolfa does mention determining the best path, this is done by the technology routing program 20 (see, for example, lines 20-23 and 41-45 in column 6). There is no suggestion that providing a plurality of translators in a mass storage device allows the determination of the best path for converting a file from one format to another. Thus, there is no rationale to support the proposed modification.

For the above reasons, it is respectfully submitted that independent claim 1 is allowable over the combination of Cyr, Williams and Tolfa. Claims 2-11 depend from claim 1 and are thus also believed to be allowable. Furthermore, these dependent claims set forth limitations not met by the prior art. Claims 2-9 and 11 all recite features that are not taught by Cyr. Applicant respectfully disagrees with the Examiner's contention that these features are "matters of obvious design choice." Regarding claim 10, Cyr does disclose translators connected by network bus 10, but there is no suggestion that translators are located on geographically separate computers.

Independent claim 12 recites a method of linking format conversion programs to convert a datafile from an initial format into a desired final format. Applicant respectfully disagrees that claim 12 is rendered obvious by the combination of Cyr, Williams and Tolfa. For the reasons discussed above, it is submitted that the combination of references do not teach the claim 12 recitations of accessing a registry database containing information on translators to determine what translators are available over a network, or selecting among

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the translators to design a chain of translators capable of sequentially converting the datafile from an initial format to a desired final format. As discussed above, the references, either taken alone or in combination, do not suggest using a chain of translators sequentially. The references also fail to disclose a subsequent translator in the chain of translators directly accessing the output of an initial translator, as required by claim 12.

Accordingly, it is respectfully submitted that independent claim 12 is allowable over Cyr in view of Williams and further in view of Tolfa. Claims 13-19 depend from claim 12 and are thus also believed to be allowable. Furthermore, these dependent claims set forth limitations not met by the prior art.

Lastly, claim 21 recites a system for printing a datafile in an unsupported initial format. The system includes a registry database containing information concerning a selection of datafile format translators that are available using a network, and a printer attached to the network and comprising a controller. The controller is configured to design a chain of translators capable of sequentially converting said datafile from the unsupported initial format to an appropriate final format. The combination of references cited by the Examiner does not teach or suggest such a system. As previously mentioned, there is no disclosure designing a chain of translators to sequentially convert a datafile to a final format. Cyr teaches a plurality of translators but does not teach that the translators are used sequentially in a chain. Williams describes sequential transformations, but does not apply to a printing system. None of the references teaches a registry database containing information concerning a selection of datafile format translators that are available over a network.

Therefore, it is respectfully submitted that independent claim 21 is allowable over Cyr in view of Williams and further in view of Tolfa. Claims 22

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and 23 depend from claim 21 and are thus also believed to be allowable. Furthermore, these dependent claims set forth limitations not met by the prior art.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the objections and rejections is requested. Allowance of claims 1-23 at an early date is solicited.

Respectfully submitted,

7/5/05

Date

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